THE WESTERN FARMER AND GARDENER,
AND HORTICULTURAL MAGAZINE.

Vol. V.] Cincinnati, November, 1844. [No. IV.

The Hyacinth.

For a description of this Flower, and its mode of cultivation, see page 88.

Our Work.

We must begin the following remarks with an apology for speaking of ourselves. We cannot, however, entirely pass over the very flattering notices of our undertaking by the leading, as well as the more humble presses, of our city and country. To be praised as warmly as we have been, particularly by the *Cincinnati Gazette*, for devoting most of our time, and a good deal of our money, to the noble cause in which we have embarked, has been no small gratification to our feelings. This has repaid us more delightfully than almost any pecuniary remuneration could. We candidly confess we feel a pride,—we trust a proper pride,—on being thus well spoken of. At the same time we take little credit to ourselves for our exertions, as the pleasure of pursuing agricultural and horticultural knowledge, both in theory and practice, has ever been our favorite occupation, since we have been in this country; and employments, however beneficial to the public, which are followed as a happiness, cannot be as praiseworthy as those duties which partake a good deal of the character of tasks. In addition to this, we have ever considered, that by perseverance and with patience, the time will, at no very distant day, arrive, when there will be sufficient of interest in the subject to support one tolerably fair farming, and one gardening journal, at this point. There is evidently a growing taste for these things here now, and we do trust most earnestly, for the sake of others, as well as ourselves, that this feeling will continue to increase. Though walking humbly, and at a very great distance from such men as a Judge Buel or a Willis Gaylord, we hope we are animated in this matter with something of the same spirit which moved these great departed minds, and for want of other and better men to take our place, shall continue to run our comparatively feeble race. Next year, health and other things permitting, we shall publish a Horticultural Magazine, separately from our Agricultural Journal, believing that the Great West, at this important central situation, will require one. But should want of health, or other now unforeseen circumstances, prevent our doing so, we trust there will be enough of the *vis animi* in our Horticultural Society, to have a periodical of their own, believing, as we do, that it is the duty of all such societies, actuated by the right spirit, to become the actual patrons and promoters for the public, of the knowledge and benefits for which they formed themselves into a body. Probably the expense of such a work, for all the purposes of furnishing the desired information, would not exceed six hundred dollars a year, and certainly by that time there would be that number of subscribers at least, to defray the cost of its publication. Our present work is more expensively got up than it need to be, and it requires about one thousand subscribers to defray its expenses of printing, &c. alone. We have ventured the above observations as much with the view of promoting the interests and welfare of the cause and of the Horticultural Society, as from any selfish personal motives we may possess on this subject ourselves. As we have said elsewhere, we shall permit no discouragements to interfere with our published pledges, to carry through our work We shall conclude by merely expressing a hope that the exertions of our friends will not be wanting to try to induce *their* friends to subscribe, in order to render the burthen on our shoulders as light as the case will admit of. E. J. H.

Aboriginal Fruits.

It is a fact in the history of vegetables, to which I remember no exceptions, that, where the wild stock flourishes naturally, there the improved varieties succeed best. Examples occur in the English Apples and the French Pears; for in no country does the crab abound more than in England, nor the wild pear than in France.—*G. W. Johnston.*

Spirit of the Agricultural Journals.

Exportation of Hemp.—Several packet ships have cleared for England this last summer, having American dew and water-rotted hemp on board. It is an excellent article, and it is highly probable it will be liked. This should stimulate the planters of Kentucky and Missouri. It can be grown as cheap here as in any other country.—*American Agriculturist.*

Apples for Swine.—It is a good method to feed for one week on sour and the other on sweet apples alternately.—*Ib.*

Materials for Composts.—Stable manure, dry charcoal dust, soot, bone dust, oleaginous charcoal, decayed leaves, leached ashes, unleached ashes, guano, sal soda, nitrate of potash, fine salt, poudrette, horn shavings, refuse sugar, ammoniacal liquor, blood, sulphuric acid, magnesia, plaster of Paris, plaster from walls ground, decayed grass, decayed straw, decayed weeds, fish, refuse oil. These will quadruple crops, for about five dollars per acre. Lime and charcoal are especially valuable. Lime is good for the rust in the gooseberry, and for all fruit trees' diseases.—*Ib.*

Native Grapes.—The size of the bunches of native grapes may be doubled by cultivating them under *glass* without heat, and the fruit three weeks earlier than in the open air. It is best to let the vines come up inside of the conservatory, as the whole vine thus has the same temperature for a start and growth.—*Ib.*

Wool for Europe.—Agents of French and English houses have been examining the finest flocks of sheep in this country, with a view of purchasing them for the European manufacturers of superfine broadcloths. This is promising for a good market.—*Ib.*

Spruce Beer.—Cold water, ten gallons; boiling water, eleven gallons. Mix in a barrel, and add thirty pounds of molasses, and one ounce or more of essence of spruce. Add one pint of yeast. Bottle in two or three days. —*Ib.*

Agricultural Papers.—It really strikes us with melancholy, to hear how little farmers in general appreciate reading these in the West. What, wait till you make money, as some say, before you will instruct yourselves? Shame on such a principle. Pray, will you wait till your children can make money before you send them to school? If you do, they will make precious little instruction in this world. But we are not willing to let the argument rest here, and will answer that the agricultural journals, by teaching you an improved system of farming, will also better instruct you how to "make money," than any other means you can possib devise for acquiring it.—*Ib.*

Guano.—Not fewer than one thousand vessels have left Great Britain within a few months. This will soon be a cheap article everywhere.—*Ib.*

Work on Sheep.—Mr. Morrell is engaged on a work on sheep, such as our farmers need. The English works are too expensive, and unsuitable to this country.—*Albany Cultivator.*

Introduction of New Varieties of Fruit.—We have been furnished by Messrs. W. R. Prince & Co., Flushing, with an invoice of estimable varieties of fruit, sent out to them by the London Horticultural Society, in March last, and since extensively propagated by them. The list embraces fourteen varieties of apples, sixteen of pears, eight of plums, four of cherries, three of grapes, four of raspberries, five of currants, five of strawberries, &c. &c.—*Ib.*

Night Soil.—Our farmers might add materially to their supply of manure, by constructing their privies so as to enable them to make use of their contents. A gentleman from Connecticut informs us that he mixed his night soil with muck, adding a small quantity of lime and ashes, and made manure enough for five acres, which he planted to corn, and that the crop is equal, if not superior, to any one he has seen.—*Ib.*

Show of the Royal Agricultural Society of England.—The number of persons that visited the show-yard on Thursday, was thirty thousand. The total receipts for admission, during the show, were twelve thousand dollars.—*Ib.*

Agricultural College in England.—The Society, it is said, has now resolved itself into a tangible shape, and will immediately commence operations.—*Ib.*

Green Manures.—Indian corn sowed broadcast is considered by some the best kind of vegetable growth for turning in. Apply lime, if desired, the fall before. Sow the corn early in the spring, three or four bushels to the acre, and when high enough for a deep working plough, turn it under and immediately sow another crop in the same way, turning that under as before, run crossways. It is believed that in this way four times as much improvement will be effected in one season, as by clover in three or four years.—*Ib.*

The Catalpa.—This tree is stated by some, among them the late General Harrison, to be more lasting than either the locust or mulberry for fence and gate posts. It can be grown from seed as easily as Indian corn, and the seed is plentiful. The tree grows very rapidly. In four years the young trees may be set out. The Catalpa is hardy enough for the Middle States. No insect seems to attack it. White mulberry is a very durable wood also.—*Ib.*

The Maclura for Hedges.—This is very successfully cultivated near Philadelphia. Mr. Maccavoy, a complete gardener, who has just come on here from Philadelphia, has the very highest opinion of this plant for the purpose. Mr. Affleck, of Washington, Mississippi, speaks very favorably of the Cherokee or Nondescript Rose for hedges; and he is experimenting with another plant, which he thinks will form better and more beautiful hedges than even the famed English Hawthorn. It is the Microphylla Rose, (red,) a standard, and he says just the plant for this purpose.—*Ib.*

New System of Manuring.—A singular idea has just been suggested in Scotland in relation to the nutrition of plants. It may be summed up in a few words, thus: that a sufficient quantity of the elements of nutrition may be absorbed in the seed of wheat, oats, barley, &c., to ensure a very large product at harvest, without any other manure. Experiments have been made with complete success, and they have been published by the Agricultural Society of Scotland. Sulphate of Ammonia has been used, and nitrate of soda and potash, and all in combination.—*Ib.*

From the American Agriculturist.

Making Vinegar.

Making cider for drink is happily nearly abandoned in many parts of our country, but for vinegar, we think that it is quite too much neglected; the consequence is, that under the name of vinegar, we have the vilest trash and compounds which can be conceived of, palmed upon the community for this highly necessary preservative and agreeable condiment. Vinegar, from well made, unadulterated apple cider, is not only the cleanest and purest in our judgment which is manufactured, but it is also more highly prized and more surely depended upon by the good housewife. Let every farmer then reserve a sufficient store of cider for it the present season. He should always have a two years' stock on hand, and in abundant fruit seasons he ought to provide for three years ahead, as it is easily kept, and subject to considerable fluctuation in price, of which he will then be able to take advantage in selling when the market affords him a good profit.

Vinegar, from pure good cider, is made in the easiest possible manner, as the latter substance will change into it with little trouble, and keep well even in a cool cellar. Some prefer an open shed for making this change. Exposed to the sun any great length of time, the casks will leak more or less; some evaporation also takes place, and the consequence is, considerable loss. After the cider has well worked, the liquor should be partly drawn off, leaving the casks only about two-thirds filled. For the purpose of admitting the air, the bung-hole must still be kept open, and to prevent insects or vermin of any kind getting in, a square piece of fine wire gauze, or if that is not at hand, a strong piece of linen cloth should be nailed over it. To hasten the souring, or rather ripening of vinegar, shake it frequently, and if necessary place a cask of it for a short time in the sun. In this case, we have generally used a long-neck bottle to stop the bung-hole, instead of gauze. The neck is thrust into the cask, leaving the large part of the bottle outside. This is pretty effectual in keeping out the vermin, and also the rain, which the gauze will not, and we think that the heat drawn from the sun by the bottle hastens the ripening of the vinegar.

The Farmer of Mount Vernon.

Washington was passionately fond of agriculture. Its improvement was ever with him an object of paramount regard. Virginia can boast of few sons to whom her agriculture has been more indebted; few who assisted in promoting its interest to a greater extent, or with the manifestation of a more ardent and patronizing zeal. The following account of his farming operations will serve to exhibit the Father of his Country,—the man first in war, first in peace, and first in the hearts of his countrymen,—in its true light:

"The farm of General Washington, at Mount Vernon, contained ten thousand acres of land in one body, equal to fifteen square miles. It was divided into farms of convenient size, at the distance of one, two, three, four, and five miles from his mansion house. These farms he visited every day in pleasant weather, and was constantly engaged in making experiments for the improvement of agriculture. Some idea of the extent of his farming operations may be formed from the following facts: In 1787, he had five hundred acres in grass, sowed six hundred bushels of oats, seven hundred acres with wheat, and prepared as much more for corn, barley, potatoes, beans, peas, &c., and one hundred and fifty acres in turnips. His stock consisted of one hundred and forty horses, one hundred and twelve cows, three hundred and thirty-five working oxen, heifers, and steers, and five hundred sheep. He constantly employed two hundred and fifty hands, and kept twenty-four ploughs going during the whole year, when the earth and the state of the weather would permit. In 1786, he slaughtered one hundred and fifty hogs, weighing eighteen thousand five hundred and ninety pounds, for the use of his family, besides provisions for the use of his negroes."

Straw is a fodder not to be undervalued,—particularly oat straw.

Miscellaneous Notes.

Mr. George Selves, of the Bank Exchange, has just imported from England, six very small Shetland Ponies, the smallest only thirty-three inches, and the largest thirty-six inches in height. He intends to drive these curiosities of the equine kind four in hand, which will present a most beautiful and *unique* appearance in our highways. The introduction of these gentle and hardy creatures will be useful, and afford a healthy and pleasant exercise for our children. They may be seen at Mr. Brown's livery stable, nearly opposite the Pearl Street House.

☞ We enjoyed the very great gratification this last autumn of visiting Mr. Jacob Hoffner's conservatories and gardens, near Cummingsville. We had been accustomed, when in England, to see a great many private pleasure grounds, but do not recollect ever having observed greater beauty, skill, neatness, and good taste, for the same sized place, than at Mr. Hoffner's. The correct judgment in laying out the plots, winding walks, and borders, leading to some arbor, or rustic seat, or shrubbery, and leaving the result to the imagination, until you suddenly reach the spot, or come in again, to your surprise, to where you have before been, is here displayed as in some of the lovely modern English gardens. Mr. Ross, the manager, is evidently in his own element, and surrounded by the highly cherished and well managed offspring of his labors. His mind is absorbed in his employment,—a sure guarantee of excellence. One of the largest and most splendid specimens of the Weeping Willow graces the verdant and well shorn borders of a small pond filled with gold and silver fish, in which a Triton pours from his mouth his native element. We venture to suggest to Mr. Hoffner, two small improvements, one of which is to paint his *red* vases in the walk descending to the pond, *green*, and the *red* pole of his martin-box *white*. In the conservatory, among the more common, are some of the rarest and most choice plants, and among the cultivated plants in the open borders are to be seen many of the most beautiful specimens of our wild flowers.

☞ Mr. Clinton Ferris, of Pleasant Ridge, Ohio, presented us this fall with a species of Cantelope Melon, which he called the Pine Apple. It was of a very large size, and the flavor we thought far superior to the Citron or Nutmeg; indeed several persons who tasted it, considered it the most delicious and the highest flavored melon they had ever met with. We have since eaten more of the same kind from Mr. Ferris, and we have no hesitation in saying, that we consider that this melon, both for size and flavor, will take the lead, when known, of every other of its kind, in our neighborhood.

☞ A correspondent, Mr. A. P. Prichard, of Granville, Ohio, inquires of us the reason why some kinds of the Cactus are blooming this year so long after their regular season, and whether this is common in Cincinnati. He says he has had in his collection an almost continued bloom from their commencement early in the spring until the present time, (October 2,) and that there has been scarcely a week from the commencement of the blooming season, that there have not been more or less flowers on his Achymeni. We are not aware of any particular cause of the Cactus this season blooming more frequently than in any other season. There are some kinds, as the Speceosa, Naparea, and the Jenkensonii, which bloom very often.—Keeping them dry, will force blossom buds. The Truncata always blooms in the winter.

☞ If any person should be desirous of examining genuine African Guano, they can have their curiosity gratified by calling at Huxley & Co.'s Seed-store, East Fifth-street, near the Dennison House. Mr. Huxley has also lately brought on from the East various new and well tried agricultural implements, as subsoil ploughs, cultivators, straw cutters, and other things of the kind, as well as the most useful small practical books on agriculture and gardening.

☞ The experience of several persons seems to prove very conclusively, that the close artificial pruning and dressing of the choice wine grape vines, is, in this climate, not only unnecessary, but undesirable, as larger crops are produced by a medium being followed between long and short pruning. By allowing vines to run up into the pruned heart of any other tree, the fruit is often protected by the foliage of the tree from late frosts in May, and the vines will thus produce plentifully large bunches.

☞ A white native strawberry has been discovered by a Mr. Goodwin, of Ashfield, Massachusetts, on the Berkshire Hills. It is of fair size, and of fine flavor,—color, yellowish white.

☞ Mr. Hovey, of the Magazine of Horticulture, in Boston, sailed for Europe two months since. We are glad of this, because we have no doubt that this trip will conduce much to the interest of his work. In a year or two *we* hope to visit England, and think that it will be of some advantage to the Western Farmer and Gardener, as we shall probably bring back with us many new and useful things, as well as some information that may be turned to good account.

☞ The second part of Mr. Colman's "European Agriculture," will soon be ready. This work will form, when completed, one of the most interesting agricultural works of the age.

☞ We observe by our Eastern papers that a periodical of one hundred and fifty pages, entitled "The American Quarterly Journal of Agriculture and Science," is about to be issued at Albany, New-York, by Dr. E. Emmons and Dr. Prime, on the 1st January next, at three dollars a year, provided sufficient encouragement is given to the enterprize. The most able men of this country are engaged to furnish this work with interesting matter, both practical and scientific, so as to be valuable to the common operations of our farmers. Names of subscribers to be sent through the Postmasters to J. A. Prime, Newburgh, Orange county, New-York.

☞ One of the surest safeguards to the great increase of injurious and destructive insects, is that admirable provision of nature—their being formed to prey upon each other. In this way, there can be no doubt, vast numbers of our noxious insects are continually diminished, some of their enemies in their turn at times greatly increasing. This last fall, we could not fail to observe immense numbers all over the country of the Dragon-fly, (Libellula,) feeding upon the gnats, musketoes, and other small winged insects. Birds also devour immense numbers of bugs and grubs of every description. The severe frosts of winter act likewise as an agent for their decrease. Upon these circumstances and facts, chiefly depend our hopes of partly, and perhaps to a great extent, getting rid of those insects, which are certainly one of the causes, and possibly the sole cause, of the injury and loss of our pear trees. Would that the frosts of the coming season might cut them all off to an individual, or rather to an *Aphis*, according to their appellation by Dr. Mosher.

☞ We refer our readers to an introductory paper by Mr. E. Sayers, on Rural Cemeteries. As we hope soon to see a piece of land, at a distance not greater than three miles from our city, purchased for the purpose of a beautifully and tastefully laid-out Burying-Ground, we have great pleasure in publishing these remarks of Mr. Sayers, who intends to follow them up, by suggesting some hints as to the most desirable mode and design for so interesting a spot. Mr. Sayers has had considerable experience at the East in laying out rural and garden grounds of all kinds. We consider that he would be one of the fittest persons in all respects to ornament a place so well calculated to refine the feelings and elevate the mind to all that is great and good, if the taste he has acquired can be put in requisition to add elegance and loveliness by artificial means to the beauty and enchantments of nature.

☞ To be happy at home is the ultimate result of all ambition, the end to which every enterprise and labor tends, and of which every desire prompts the prosecution.

☞ When a good and useful man departs from our midst, although we lament his loss, yet the effects of his works and worth leave a train of pleasing lingering but melancholy light behind him. Since the publication of our last number, our greatly valued and highly respected contributor, Mr. T. G. Lea, has been suddenly and very unexpectedly taken from us by an unerring Hand. His devotion to science and learning, and particularly the works of nature, casts a halo of soft radiance around his memory. His innocent and inquiring walks among the objects of natural history, were rewarded by the fruits of a highly gifted mind. Our readers will recollect his valuable notices of our native plants in the months of March, April, May, June, and July last. His botanical knowledge was probably unequalled in this place. We trust that some of his associates, who were more intimately acquainted with his virtuous and valuable character, and who could consequently appreciate it better than we, will be so good as to send us a notice of our deceased acquaintance and revered friend.

E. J. H.

Hamilton County Agricultural Society.

It gives us very great pleasure to inform the farmers of this county, that the Executive Committee for the ensuing year, have entered upon their duties with great zeal and spirit. Already have they determined on and made out a most respectable list of premiums for stock, implements, produce, &c., for the next exhibition.—Many of the oldest farmers, and some of the hardest cases to get on to the road of modern improvements, have, we observe, fallen into our ranks, and onward we shall undoubtedly march together to new conquests,—victories of peace and usefulness,—far, far beyond all the laurels that can be gained by war against any nation, unless it should arise from the necessity of self-defence.

E. J. H.

Analysis of Soils.

The following is a method of analyzing soils for ordinary agricultural purposes: Weigh a convenient quantity of the earth to be analyzed, say one thousand grains, to be dried in the air; dry the same before a fire on paper, so as not to scorch the paper; reweigh, and the difference will be the organic matter. Pour a convenient quantity of muriatic acid on the remainder; stir, and when settled, pour it off, and add oxalate of ammonia; the precipitate will be the lime;—mix the remainder with water, and stir it well; when a little settled, pour off the turbid mixture, and the suspended contents are argillaceous, and the deposite silicious.—*Gardener's Chronicle.*

Everybody's Chapter.

☞ One of the largest trees on record is found at the Island of Penang. It is one hundred and thirty feet high to the *first branch*, and thirty-six feet round in the largest part.

☞ An Irish travelling merchant, alias a pedlar, asked an itinerant poulterer the price of a pair of fowls.

"Six shillings, sir."

"In my dear counthry, mi-darling, you might buy them for sixpence a piece."

"Why don't you remain in your own dear country."

"Case we have no sixpence, my jewel," said Pat.

Cleaning Silk.—The following directions for cleaning silks are by one of the first Parisian dyers: Half a pound of soft soap, a teaspoonful of brandy, and a pint of gin; mix all well together; with a sponge or flannel, spread the mixture on each side of the silk without greasing it; wash it in two or three waters, and iron it on the wrong side; it will then look as good as new.

☞ *Punch* says that the Italians used cattle instead of coin; and a person would sometimes send for a thousand pound bullock, when he would receive it in twenty-five pound sheep, or perhaps if he wanted very small change there would be a few lambs among them. The inconvenience of keeping a flock of sheep at one's private account, led to the introduction of bullion.

A Good One.—It is a shame to make the Presidents of the United States *give their countenance* to such a business, said a lady on observing a sign having thereon painted the likenesses of all the Presidents hanging before a *tavern*.

☞ Somebody, we do not know who, gives this excellent advice to mothers: "A child is born. Now take the germ, and make it a bud of moral beauty. Let the dews of knowledge, and the light of virtue, awaken in it the richest fragrance and the purest hues; and above all, see that you keep its face and frock clean."

Phenomenon and Phenomena.—A learned divine, the Rev. J. L. G———, was accosted a few years since, by a young ecclesiastic of Oxford University, who was accompanied by a few of his pupils, and who jocosely exclaimed:—"Sir, we have had a dispute in our school about the difference of the terms, phenomenon and phenomena,—what is your opinion?" The philosopher smiled, and after a pause, wrote these words:

When one bright scholar puts the fool's cap on,
He makes himself a real phenomenon.
If others join him, and like asses bray,
They altogether make a phenomena.

Politeness.—Men think very little of the value of a bow or a smile, yet how small the cost—how great the return! By a few soft words and pleasant looks friends have been made, enemies reconciled, and lasting attachments formed. A smile! it beams upon the lover's heart like a ray of sunshine in the depths of the forest. A nod! it has gained more friends than wealth and learning put together. A grasp of the hand! it is more potent in cementing the ties of affection, than all feelings of self-interest.

☞ In "Martin Chuzzlewit," we find that "a werb is a word which signifies to be, to do, or to suffer, which is all the grammar, (and enough too,) as ever I was taught, and if there's a werb alive, I'm it; for I'm always a bein', sometimes a doin', and continually a sufferin'."

A Hasty Man.—The brain of a hasty man is like a sooty chimney; it is continually in danger of taking fire from the flames beneath. The brain of a well ordered and quiet citizen is like a chimney newly swept; the sparks of passion pass through it, and escape without danger into the coolor regions of thought and reflection.

Wisconsin—Wiskonsin—Wiskonsan—or Ouisconson.—We frequently see this word spelled in all these different ways. It should be known that the statute of Wisconsin directs the name to be spelled *Wisconsin*, and further enacts that all legal documents shall so spell it, or be void. In sales, all declarations, pleas, and process, it must so be spelled, or they will be useless, and all acts under them illegal.

Parting Gift.—"What can I give you for a keepsake, my dearest John?" sobbed out a sentimental girl to a scapegrace lover, the Hon. Jack W———, who was about to join his ship in warlike times. "Give, my dearest angel," cried Jack, in some confusion—"Hem—why, why you hav'nt such a thing as a five pound note about you, I suppose?"

☞ The Charleston papers boast of a new and very fine species of Muskmelon, called the *Quail*, from the Mediterranean. One of them, which is described, measured twenty-three inches in length and twenty-four in circumference, and weighed fourteen and a quarter pounds.

☞ The silk culture is rapidly extending in Tennessee. Large quantities of cocoons are raised and sold at three dollars per bushel, and a company with a capital of one hundred thousand dollars is located on the Red River, thirty-five miles below Nashville, engaged in the exclusive manufacture of silks.

☞ Whoever is honest, generous, courteous, honorable, and candid, is a true gentleman, whether learned or unlearned, rich or poor.

Hamilton County Agricultural Show.

Below we have the pleasure to publish the report of the meeting held this fall at Mount Pleasant. Everything proceeded with zeal and spirit, according to the amount of stock, implements, &c. &c. exhibited; and therefore we feel assured that we are in a right train for future success and benefit. The Executive Board for the ensuing year has already manifested great energy and enthusiasm for the objects intended by the Society,—the premiums being both numerous and respectable.

OFFICERS.

President—JOHN W. CALDWELL, Carthage.
Vice-Presidents—Charles Duffield, Cincinnati; F. G. Cary, Cary's Academy; Ebenezer Stephens, Mount Pleasant.
Corresponding Secretary—W. H. H. Taylor, Cincinnati.
Recording Secretary—Charles Cheney, Mt. Healthy.
Treasurer—John Martin, Carthage.
Executive Committee—Joseph Cooper, Abraham Sanburn, John Ross, Carthage; W. W. Cary, Cary's Academy; Robert Mullen, Montgomery; G. Williamson, Springdale; William H. Hulbert, Cincinnati; E. R. Glenn, Sharonville; James Sampson, Stewart M'Gill, J. A. P. Carnahan, Joseph Jackson, Mount Pleasant.
John B. Duerinck, Cincinnati, Ohio, Professor of Botany and Vegetable Physiology.
A. Randall, Cincinnati, Ohio, Professor of Zoology, etc.
J. A. Warder, Cincinnati, Ohio, Professor of Anatomy, Physiology, and Pathology of the Domestic Animals.
Charles Whittlesey, Cincinnati, Ohio, Professor of Agricultural Chemistry and Geology.
E. R. Glenn, Sharonville, Ohio, Curator.
The next election of officers will take place at the next Fair in September, 1845.

HORSES.

The committee on Horses report that the exhibition was creditable to our county, many fine animals being offered for inspection. It may well be supposed that it was quite difficult for the committee to decide which were the best and most perfect; but they decided according to the best of their judgment, and awarded as follows:

For the best thorough-bred stallion, Jackson Heffner, $10,—Young Medock.

For the second best, W. W. Cary, $3,—Young Priam.

For the best draught stallion, R. D. Hitts, $10,—Grand Sultan.

For the best yearling, thorough-bred, G. Williamson, $3,—by Langford.

For the second best, William Atkinson, certificate,—by Tuckey-Hoe.

For the best thorough-bred sucking colt, Joseph Cooper, $3,—by American Boy.

For the second best, G. Williamson, certificate.

For the best yearling, common stock, C. Hunt, $3,—by Orphan Boy.

For the second best, Charles Cheney, certificate,—by Priam.

For the best sucking colt, common stock, E. R. Glenn, $3,—by American Boy.

For the second best, A. Gardener, certificate.

For the best saddle horse, M. G. Seward, $3.

For the best pair of carriage horses, J. Sampson, $3,—there being no competition.

For the best thorough-bred brood mare, G. Williamson, $10,—Lady Moscow, imported.

For the second best, Joseph Cooper, $3,—Whirlwind.

For the best yearling filley, thorough-bred, G. Williamson, $3,—sired by Langford.

For the best sucking filly, G. Williamson, $3,—sired by Grey Medock.

For the best brood mare, common stock, R. Kemper, $10.

For the second best, R. D. Hitts, $3.

For the best two year old filly, thorough-bred, W. H. H. Taylor, $4.

For the best yearling filly, H. Gambriel, $3,—sired by Priam.

For the second best, W. W. Cary, certificate,—sired by Priam.

For the best sucking filly, W. Conkling, $3,—sired by American Boy.

For the second best, William Riddle, certificate,—sired by Grand Sultan.

In conclusion, the committee hope that none will be dissatisfied with their decisions, but that all will lay aside selfish considerations, and rejoice in the promotion of the common interest of the Society.

WILLIAM SCUDDER,
A. L. SCHENCK,
JOHN SNYDER,
BENJAMIN SWEET,
G. B. GILMORE,
} *Committee.*

CATTLE.

We, the judges appointed to inspect the various classes of Cattle, brought forward for exhibition and competition before the Fair, beg leave to report as follows:

For the best bull, E. R. Glenn, $10,—Magnum Bonum.

For the best two year old bull, John F. Elliot, $4.

For the best yearling bull, S. Cloon, $3.

For the best sucking bull, S. Cloon, $3.

For the best three year old cow, E. R. Glenn, $10,—Rosbrell.

For the second best, J. Cooper, $3,—Belina.

For the third best, E. B. Reeder, certificate,—Snow Ball.

For the best two year old heifer, Joseph Cooper, $4,—Snow Drop.

To S. Cloon, $3 for the best yearling heifer,—Queen of the West.

To E. R. Glenn, certificate for the second best,—Young Lady Ann.

To S. Cloon. $3 for the best sucking heifer calf.

To E. R. Glenn, certificate for the second best.

To E. R. Glenn, $10 for the best milking cow.

To Joseph Cooper, $3 for the second best.

To William Cary, $4 for the best yoke of oxen.

The committee can freely say, that many of the animals exhibited, were not often to be surpassed, and some rarely to be equalled; all of the stock entered, except the milch cows and working oxen, being thorough-bred Durhams. It is a source of pride to us to know, that the farmers of this county can show such stock; and we trust they will continue a course so advantageous to the interest of agriculture.

J. H. GERARD,
P. KEMPER,
L. MORSE,
A. A. MULLETT,
ROBERT CARY,
} *Committee.*

SHEEP.

The committee on Sheep, beg leave to say, that they found it extremely difficult to determine which should be honored with the premiums. After a close and very particular examination, the committee submit the following report:

For the best buck for wool, to E. R. Glenn, $5,—Saxony.

For the second best, to W. W. Cary, certificate.

For the best buck lamb for wool, to W. W. Cary, $3.

For the second best, to George Smith, certificate,—Southdown and Bakewell.

For the best ewe for wool, to W. W. Cary, $3.

For the second best, to E. R. Glenn, certificate,—Saxony.

For the best buck for carcass only, to J. Cooper, $3,—Bakewell.

For the second best, to George Smith, certificate,—Southdown.

For the best ewe for carcass, to E. R. Glenn, $3,—Southdown.

For the second best, to George Smith, certificate,—Bakewell.

For the best fat sheep, to E. R. Glenn, $3,—Southdown.

For the second best, to W. W. Cary, certificate.

The committee would remark, that all of the sheep exhibited, were deserving of high praise.

CHARLES CHENEY,
WILLIAM CARY,
CHARLES RICHARDS,
REUBEN WHITE,
JOHN FERRIS,
} *Committee.*

SWINE.

The exhibition of Hogs afforded a good evidence that a work of improvement is going on in this department of the farmers' stock. The committee submit the following report, after a careful examination:

For the best boar over twelve months old, to J. Cooper, $3,—Grazier.

For the best boar under twelve months old, to E. R. Glenn, $3,—Grazier and Berkshire.

For the second best, to E. W. Cunningham, certificate.

For the best sow over twelve months old, to E. R. Glenn, $3,—Berkshire.

For the second best, (white,) to G. Smith, certificate.

For the best sow under twelve months old, to E. R. Glenn, $3,—Russia and Berkshire.

For the second best, (white,) to George Smith, certificate.

For the best fat hog, to E. R. Glenn, $3,—Berkshire.

LEWIS MORSE,
E. STEPHENS,
W. A. GRAHAM,
A. SANBURN,
} *Committee.*

GRAIN.

The committee on Agricultural products report, that they have examined the samples of Grain offered, and have awarded the premiums as follows:

To Zebulon Strong, $2 for the best bushel of wheat, weight 62 pounds.

To H. Gambriel, certificate for the second best, weight 61½ pounds.

To A. Martin, $2 for the best bushel of barley, weight 52 pounds.

To John Ross, certificate for the second best, weight 50½ pounds.

To A. Martin, $2 for the best bushel of oats, weight 34½ pounds.

To E. R. Glenn, certificate for the second best, weight 34 pounds.

To P. L. Striker, $2 for the best bushel of rye; a good article. No competition.

E. D. WILLIAMS,
S. M'GILL,
} *Committee.*

BUTTER.

The committee are of opinion, that all the specimens of Butter, Cheese, and Honey exhibited, were of superior quality. After a careful examination, they award as follows:

To J. C. Gaston, $5 for the best butter.

To A. Sanburn, $3 for the second best.

To W. W. Cary, $1,50 for the third best.

CHEESE.

There were but two Cheeses exhibited; each weighed sixty-six pounds—an excellent article. The first and second premiums,—$6 and $1,50 were awarded to the owner, Lewis Morse.

HONEY.

There were but two lots of this valuable product to the farmer exhibited, and they belonged to one person. The honey was exhibited in the glass cases where it was deposited by the bees, and as taken from a hive invented and patented by the exhibitor, said to

be very superior, and a preventive of the moth, and so arranged as to make the bees produce the largest quantity possible. The committee awarded the first and second premiums on honey,—$3 and $1,50,—to A. Sanburn.

J. W. CALDWELL,
J. A. WISEMAN,
JOHN CLARK,
D. K. ESTE,
} *Committee.*

DOMESTIC MANUFACTURES.

The exhibition of Domestic Industry was quite interesting, although not very extensive. The specimens of Woollen Goods were numerous, and very pretty. The committee, after a careful examination of the articles offered, award as follows:

Mrs. Carr Wright, $3 for the best quilt.

Mrs. W. P. Hulbert, certificate for the second best.

Mrs. S. Wilson, $3 for the best double coverlet.

Mrs. W. W. Cary, certificate for the second best.

Mrs. W. W. Cary, $1,50 for the best pair of stockings.

Mrs. J. Sampson, certificate for the second best.

Mrs. H. Gambriel, $3 for the best ten yards of tow cloth.

Mrs. S. Wilson, $1,50 for the best diaper.

Mrs. P. L. Striker, certificate for the second best.

Mrs. W. W. Cary, $3 for the best ten yards of fulled woollen cloth; and $3 for the best ten yards of domestic flannel.

Mrs. Vandyke, $3 for the best rag carpet.

Mrs. J. Sampson, $3 for the best pair of blankets.

Mrs. W. W. Cary also exhibited a fine specimen of woollen yarn.

Mrs. E. Fisher, a beautiful stand-cover and reticule; and E. Ferguson, a fancy basket, displaying much skill and taste.

Miss Viley, a portfolio of very fine drawings of flowers, fruits, &c. &c.

There can be no doubt of the beneficial effect of exhibitions of domestic fabrics, and that the good effects will be seen and felt in the community by an increase of domestic industry and happiness.

A. H. MULLETT,
J. FERRIS,
J. L. SMITH,
} *Committee.*

SILK.

We were sorry to see so little competition in an article that should become one of our staples. Of the adaptation of our soil and climate to the successful prosecution of the business, there can be no doubt. There has been two factories for the manufacturing of silk goods established in our vicinity within the last year, and are now in successful operation. The cocoons exhibited were a very superior article; the reeled silk fair. The committee awarded to J. M'Hannon $3 for the best reeled silk, and $3 for the best cocoons; there being no competition.

A. H. MULLETT,
J. FERRIS,
J. L. SMITH,
} *Committee.*

FRUIT.

The display of Fruit was very meager, there being only two kinds of Peaches and one variety of the Plum exhibited. The judges on fruit pronounced the Peaches exhibited, as Rodman's Red Cling, by W. A. Van Horne, Esq., of Franklin, Warren county, Ohio, very superior, and worthy of a premium, which could not be awarded, as Mr. Van Horne was not a resident of the county.

MRS. J. COOPER,
MRS. E. W. CUNNINGHAM,
MRS. E. R. GLENN,
MRS. LEWIS MORSE,
MISS HAGERMAN,
} *Committee.*

VEGETABLES.

The only display of Vegetables, was some fine specimens of Pumpkins,—forty-three,—weighing five hundred and forty pounds, being the product of one vine, said to be a very superior sweet pumpkin, exhibited by J. W. Hoel; a certificate was awarded. Also, one weighing about sixty pounds, called the Sugar Pumpkin, exhibited by J. W. Caldwell, to whom a certificate was awarded for the largest pumpkin.—There has been a great improvement made in the variety of pumpkins cultivated within the last few years; for fall feed for milch cows, or for fattening cattle and hogs, they are an admirable crop. When grown amongst corn, the expense of raising them is quite trifling; and even when cultivated separately, they are generally a profitable crop.

J. W. CALDWELL,
J. A. WISEMAN,
JOHN CLARK,
D. K. ESTE,
} *Committee.*

PLOUGHING MATCH.

There was but little spirit manifested at the Ploughing Match, and hardly any competition, only two teams entering the field. The premium was too small to create any emulation; considering the circumstances, the work performed was highly creditable to the ploughmen, and the ease with which the horses done their work, was good evidence that the ploughs were of very perfect construction. The judges awarded the premium of $3 to P. L. Striker, for the best ploughing and the superior management of his team.

S. CLOON,
A. S. HAGERMAN,
JOHN ROSS
JAMES SAMPSON,
} *Committee.*

SADDLERY AND HARNESS.

The committee awarded to J. B. Cobb the first premium, a certificate, for the best saddle, and the second premium of a certificate for a good Jersey horse harness.

WILLIAM A. GRAHAM,
S. WILSON,
S. CLOON, } *Committee.*

AGRICULTURAL IMPLEMENTS.

"The farmer should spare no pains nor expense to procure the best implements for working and dressing his fields and preparing his crops for use and sale; these implements, besides being perfectly fitted for their various purposes, should possess the qualities of being used with the least possible labor, for man or beast; and while unmanageableness and clumsiness ought in all cases to be avoided as occasioning a wasteful expenditure of power, due regard must be observed to render them sufficiently strong for the service to which they are to be appropriated."

The number of implements exhibited at the Fair was quite limited, and the committee regret that there was no more competition in this department; although there were some very valuable articles offered.

Virginia Reaper.—We the undersigned, committee on Agricultural Implements, having been called on to examine the Reaping Machine of C. H. M'Cormick, Esq., of Virginia, have carefully done so, and as far as we can judge, without seeing it in actual operation in cutting, are entirely satisfied of its great utility. Not having had an opportunity to see this machine operate, we were careful to examine a variety of testimonials in the possession of Mr. M'Cormick, from gentlemen of the highest respectability in Virginia, New-York, and most of the Eastern States. From these testimonials, together with the apparent simplicity, (yet ingenuity,) strength, and efficiency of the machine, we confidently recommend it to the patronage of our brother farmers, and the West generally, believing that when it proves to have been completely established in Virginia, it must be found of immense importance to the West.—The machine exhibited at our meeting was sent round by New-Orleans, it seems, to be used in our last harvest, as were others, in other Western States, but was delayed on the way and did not arrive until too late. A further evidence of the high estimate which is placed upon this machine, is that Mr. M'Cormick has made an arrangement with A. C. Brown, Esq., of Cincinnati, a well known and extensive manufacturer of that city, for the manufacture of two hundred machines, or more if the demand requires it, to be *warranted* to cut FIFTEEN ACRES of wheat per day with ease, to save a bushel of wheat to the acre, that would be lost by the ordinary mode of cradling, and to be durable and not subject to get out of order, at one hundred dollars, at the manufactory at harvest, or one hundred and six dollars at four months. If these things be *performed*, the Reaper will more than pay for itself in cutting a single harvest, therefore there can be but little risk in trying it. It is contemplated to send machines from Cincinnati into the States of Illinois, Indiana, &c.—We cheerfully award to Mr. M'Cormick a certificate. All of which is respectfully submitted.

JOHN ROSS,
A. SANBURN,
JAMES SAMPSON, } *Committee.*

PLOUGHS.

There were several kinds of Ploughs exhibited. The first premium was awarded to H. Sloop, $3, for his Plough No. 8, which was a very beautiful article, and of superior workmanship, having been finished without the use of paint to hide the imperfections. Mr. Sloop deserves patronage for the time and labor he has spent in perfecting his plough, to answer the wants of the West.

A certificate was awarded to Raymond and Hubbel for their No. 6, second best.

Mr. C. Cheney was awarded the first premium of $3 for a Subsoil Plough, said to be a very superior article, and of great benefit when used on worn-out land. It was manufactured in the East.

HARROWS.

To E. Stephens, $3; there being no competition. Mr. Stephens also exhibited a very fine large Roller.

STRAW CUTTER.

M. Greenwood, $3 for C. P. Ross's Patent Straw Cutter. It could be readily arranged so as to cut the straw any desired length.

There was also another very simple and cheap one shown, to which a certificate was awarded.

WAGONS.

To J. Sampson, $3 for the best two horse wagon; a good substantial article.

HAY-FORKS.

To J. C. Hunt, $1,50 for a fine article of hay-forks; manufactured at Reading, in this county, by the exhibitor.

CHURNS.

To S. Cloon, a certificate for a very cheap simple churn, of easy construction.

LARD KEGS.

To John Adams, a certificate for the best specimen of lard kegs.

AXES.

To G. W. Williams, a certificate for a fine article of axes.

S. CLOON,
A. S. HAGERMAN,
JOHN ROSS,
JAMES SAMPSON, } *Committee*

"The Silk Question Settled."

We have not yet had the pleasure to receive this second edition, but the following remarks on the general matter coincide with our views on the subject. They are from the *Morning Herald*, of this city.

We are indebted to J. R. Barbour, an enthusiastic advocate of the Silk Growers and Silk Manufacturers, for a pamphlet entitled, "*The Silk Question Settled.*" It is the second edition of the Report of the Proceedings of the National Convention of Silk Growers, and contains the testimony of one hundred and fifty witnesses to the practicability of growing and manufacturing Silk in this country, to great advantage. A few items picked up here and there at random, through the pamphlet, may be somewhat interesting to our readers. It seems that ladies in France are assuming important stations in this department of industry. *Mademoiselle Peltzer* is at the head of one of the leading Silk Culture Societies. *Madame De La Forest* has made one of the most valuable experiments, producing thirty pounds of silk from three hundred pounds cocoons. More than that, however, has been done in this country.

The culture of silk was well known in the colonies before our revolution. From 1740 to 1790, hundreds of pounds of excellent silk were grown in the Southern, Middle, and New-England States. The revolution arrested the progress of the culture, and the cultivation of cotton absorbed all the attention of the south.

The last two or three years have witnessed a rapid progress of the silk culture. Letters were produced in the convention from one hundred and fifty persons, stating that with occasional disasters, hundreds of bushels of excellent cocoons have grown recently upon our soil, and under our own suns and showers.

According to the opinions of the best judges, our silk, in the state in which the worm leaves it, or when properly reeled, is a decidedly superior article. Dr. Franklin first proclaimed this fact; subsequent experiments have verified it, and it is further confirmed by the high price of our silk in the market, compared with foreign silk.

In reply to the objection that we cannot compete in the manufacture of silk with the cheaper labor of China and India, Mr. Barbour says, first, that labor is always to be estimated, not by what it costs, but by what it can be made to produce; and second, that the cheap labor of China and India is just as available for the cotton business, but we are already exporting cottons to these countries. Mr. Barbour, when about to close his speech, adverted in a tone of quiet humor to his velvet vest and cravat, grown and manufactured among the green stumps of Ohio.

He should be happy to tell his audience something about them, only his good mother always taught him never to talk about his own clothes,—especially when he happened to have something rather nice,—rather above the common run of things. (Laughter and cheers.) But if his audience would come and shake hands with him, he would be very happy to show them his jacket. (Roars of laughter, and cries of go on.)

Dr. Smith, of Baltimore, read a very interesting letter. He inclined to the belief that the culture of silk should be made one of the objects of attention in every farmer's family—just as much so as the making of butter.

The following passage from his paper, shows that there is little to be expected from the Southern States in this branch of industry, on account of the paralysing influences of Slavery:—

"I am sorry," he says, "I cannot say much of the success of the business in the Southern States. The people there seem to lack that industrial energy and perseverance, and, especially, that appreciation of small things, necessary to the success of such a business. But, in the North and East, where industry, energy, and ingenuity dwell; and in the West, the Great West, the young Giant of the world, where enterprise progresses with a whirlwind rush, where every seed that is planted, is soon to produce fruit, either from the undiluted richness of its soil, or the indomitable exertion and energy of its people,—in both of these sections of our country will the silk business flourish profitably to individuals and to our country, until the entries in our Custom-Houses are reversed, and instead of the importation of twenty millions of dollars of silk, we shall see recorded there the exportation of forty millions of dollars worth annually."

A Singular Fact in Natural History.

There is a fine black cur dog, of sagacious countenance, in Newport, opposite this city, which regularly every morning drives out a cow to the woods and commons, stays by her all day, keeps off from her all hogs and other cattle, and drives her home every evening to be milked. This dog we notice almost daily with the cow near our farm, one mile and a half back of the town. E. J. H.

☞ The best succulent food for milk cattle in winter is mangle-wurtzel, sugar-beet, rutabaga, pumpkins, and potatoes.

☞ *Tight lacing* and *loose habits* are the most fruitful causes of consumption.

From the American Agriculturist.

New-York Agricultural Institute.

The object of this Institute is to afford facilities to those desirous of entering upon a course of study preparatory to farming, the advantage of which has been made evident by the researches of a large number of scientific men and experienced agriculturists.

The necessity for an improved system of husbandry, is apparent from the decreasing harvests of many parts of the sea-board States. The present reckless tillage of too many of our farmers, reduces the finest lands to sterility by a succession of exhausting crops; and emigration is the consequence. These evils, unless speedily checked, will destroy our prosperity; for the cultivation of grain is becoming unprofitable, and too great an importation of food from the West would in a short time absorb the resources of the wealthiest Eastern States. The only effectual remedy is the improvement of cultivation; not a mere application of tons of manure, and shiploads of lime, per acre, *but their economical use.* Common manuring has been practised from the remotest antiquity, and good crops have been obtained; *but it is the judicious addition of such substances as are necessary to the soil, in proper quantity, with a view of attaining a definite purpose, that constitutes professional agriculture.*

To individuals, this system will prove a source of wealth, even on ordinary lands. Less capital is required to hold the same surface, because every acre yields a revenue; two or three crops can be taken annually, where one is now scarcely attainable; the heavy expenses of manuring and keeping stock are reduced to a trifle; and machines can be made to perform much of the work now in the hands of laborers, sustained at a heavy expense. In maintaining sheep and cattle, the use of food properly prepared and selected for its chemical value, will reduce the charges to the lowest point, while the development of the animals is better secured.

By requiring a preliminary course of studies, and introducing the exactness of science into agriculture, it will rise to the dignity of a PROFESSION, and be regarded as a suitable calling for persons of liberal education, instead of an obscure art. Numbers of talented young men, who, after leaving college, see no other roads to distinction or wealth but medicine, engineering, law, or divinity, will direct their energies towards the improvement of farming; a change not less serviceable to the art than advantageous to themselves; whereby they exchange the uncertainty of competition in employments already overstocked for the certainty of systematic agriculture. The studies of the institute are agriculture, chemistry, analysis, and physiology; and measures have been taken to introduce a course of instruction in agricultural mechanics and rural architecture. These are distinct classes, so that students can attend any separately.

In *Agriculture* will be taught all facts in chemistry, geology, and botany, useful to the farmer—the drainage and preparation of soils—the collection, storage, and preservation of provender and fruits—the feeding and improvement of stock—management of orchards, vineyards, &c.—the preparation and *economy* of manures, both organic and mineral, with their action and causes of success or failure. In short, all the topics embraced in the courses given by Professors of Agriculture in European Colleges, will be discussed.

Chemistry, as an abstract science, is taught by Professor DRAPER in the University.

Anatomy and *Physiology* by Professor PATTISON. This course is directed more especially to an examination of the structure and functions of the human body, and may be attended with great profit to the student.

Analysis of Soils, the ashes of plants, and manures, will be conducted by the students under the direction of the subscriber, with such assistance as may be required.

The city of New-York offers numerous advantages in carrying out the objects of the Institute; the facility of access—the high cultivation of many farms, nurseries, &c., in the vicinity—the conservatories and market gardens—the large collections of farming implements—the choice seeds obtainable—the numerous artificial and mineral manures that can be examined—constitute it the best locality in the United States. Good board and lodging near the University can be had for from $2,50 to $3,00 per week.

The *Institute* is situated in the University of New-York. It opens the first Monday in November, and continues in session until the first of March. This period has been chosen for the accommodation of those engaged in farming. Fees for the course on Agriculture, $20; for Analysis, $30; for both, $40. The courses on Agriculture and Analysis are conducted by

D. P. GARDNER, M. D.,
Formerly Professor of Chemistry, &c., in Hampden, Sidney College, Virginia.

From the London Gardeners' Chronicle.

Hybridizing.

Among the many contrivances by which man has succeeded in converting the wild productions of untamed nature into bodies better adapted to his artificial wants, nothing has produced more past advantage or promises more future profit than *hybridizing*. We shall not refer in this place to what has been done in the animal kingdom, but confine the attention of the reader to its effects upon vegetation.

The practice is regarded as one of very recent date; and so it is, as an artificial process, applied by rule to definite purposes. But he must be a bold man who dares to assign to it historical limits; on the contrary, it may be supposed to date from the creation—or rather, it is in a manner certain that it does. The presence of winds or insects must necessarily from the beginning have produced effects upon plants which resulted in hybrid productions.

Hybridizing is effected by applying to the stigma of one plant the pollen of some other; the end of which is the generation of a form participating more or less in the attributes of both its parents. Nature, in her wildest state, opposes no insurmountable difficulties in the way of this operation. Insects, bepowdered with the pollen of one plant, plunge into the recesses of another, and thus effectually destroy the purity of races. The natural brush on the body of a bee will convey the subtile powder as well as the trim camel's-hair pencil of the artificial operator.

It is contended, indeed, that this cannot be; because if it were so, all species must, in the lapse of ages, be confounded in one inextricable chaos. But, in the first place, this supposition is of little force, till it is shown that that which is easily done artificially cannot possibly take place naturally; and secondly, it must be proved that the wild races of plants actually do remain in all their original purity. No botanist would, we suspect, venture upon such an argument as that. The genera Salix, Rubus, Ross, and Carex, would make the stoutest advocate of original purity pause before he threw himself into the lists. Nobody, in fact, can possibly doubt that wild hybrids exist, are common, and perhaps much more common than we think for We will not stop to quote notorious and proved instances of this, because we regard the fact as being beyond all dispute.

Let us not, however, infer from this that no natural obstacles are opposed to the indiscriminate mixture of races in plants; on the contrary, there are barriers which cannot be overleaped. By some mysterious agency, there is a complete bar to all intermixture of plants not closely related to each other. An elm may certainly mix with an elm, and perhaps with a nettle-tree; but not with an oak. A peach may, peradventure, cross a plum, but not an apple. These obstacles are, doubtless, connected with the molecular constitution of plants, the precise nature of which we have no means of examining. Another obstacle consists in the obvious fact that the pollen of a flower has a better opportunity of falling upon the stigma that belongs to it, than pollen brought from any distance; and we know that if pollen has once taken effect, no after-application of other pollen can change the result. In fact, the natural hybridizing of wild plants will generally take place when, owing to some accidental cause, the proper stamens of the flower prove defective.

But there is a still more effectual obstacle to the confusion of races by natural hybridizing. Although we conceive that the *production* of hybrid plants naturally is of more common occurrence than may be supposed, it must be remembered that the *preservation* of them is quite an artificial process. A hybrid tree springs up; it has no means of multiplying itself, except by seed. That seed has no stable constitution, but has a tendency to return towards the condition of one of its parents; in this way the hybrid disappears, while the parents remain; or it may be, and often is, barren; and then it remains as a solitary, childless individual. Again, a hybrid herb appears; it is exposed to the same obstacles as the tree, in the way of perpetuation: it is barren; its seeds of themselves tend towards the original stock, which is recovered in a generation or two; or they are at once fertilized by the pollen of one of the hybrid parents, when the tendency to a return to its original stock is increased tenfold in strength. It is not, therefore, likely that natural hybrids will often be long perpetuated, although they may be frequently produced.

We mention these things by way of vindicating the hybridizers, who have been accused of attempting to subvert the whole order of nature by monstrous practices. It is clear that they only imitate the practices of nature. It is equally clear, too, that the occasional formation of natural hybrids is intended as a manifestation to man of one

of the sources of power with which he is so largely provided. His reason is to be called upon to turn to profitable account that which, in savage nature, leads to no result.

Hitherto the operation of hybridizing has been mainly confined to gardens. But see what advantages have come of it there. What were our Roses in 1780, when the first China Rose reached England? and what are they now? The China Rose hybridizes so freely with almost every other, that there is hardly an ancient species to which it has not lent some part of its rich foliage, gay colors, and abundant blooming. Can anything be more striking than the effect of hybridizing upon Pelargoniums, Heaths, Gloxinias, Verbenas, and Gladioli? By this process we have given to the hardy Pears of the north all the richness and delicacy of the south; to watery Grapes the perfume of the Muscat; to the pale-faced but hardy Rhododendrons of the Caucasus and America, the rich and glowing colors of their tender brethren of India; to the gaudy Azalea of Pontus, the crimson of the small-flowered fragrant species of the United States.

Such striking consequences of the very first operations in hybridizing, have excited a universal desire to vary and extend them. Everybody now, who cares for his garden, asks himself in the first place what he can do to get new seedlings; and to hybridizing he looks exclusively for assistance.

Hybridizing is a game of chance played between man and plants. It is in some respects a matter of hazard. What increases the charm of the game is, that although the end of it may be doubtful, yet a good player can judge of the issue with tolerable confidence, and that skill and judgment have in this case all their customary value.

Though hybridizing has already led to important results, they are probably nothing compared with what may be expected to come of it. We anticipate through its assistance a change in the whole face of cultivated plants, and we shall be much surprised if even a few years do not bring us acquainted with races of trees, esculents, corn, and forage plants, of at least as much importance in their way as those which have already appeared among fruits and flowers: all that is wanted is to call attention to the subject, and to point out what the principles are which the experimenter has to bear in mind.

The effect is produced by applying the pollen of one flower to the stigma of another. The pollen indicates the male parent, the stigma the female. In performing the operation, it is necessary to use precautions:—The female flower must be deprived of her stamens before they burst and disperse their pollen; and as soon as the stigma is glutinous enough to hold it fast, the pollen must be applied with care. Should this course not be taken, the stigma is very likely to be inoculated with the pollen of her own or some other flower, and then the pollen which it is intended to use will not take, for it must always be borne in mind that a stigma once inoculated cannot be inoculated again. From want of these precautions, people are continually fancying they have obtained hybrids when they have only obtained natural seedlings. At least half the specimens of so-called hybrids sent to us for examination, are not hybridized at all. When the Dean of Manchester, who is the greatest of all authorities in this matter, wishes to obtain a cross, he always endeavors to force the female parent before others of this kind blow, so as to be insured against accidental inoculation from pollen floating in the air. Want of attention in these minutiæ has led to some singular errors on the part of a very ingenious correspondent, who fancied he had obtained hybrids between Crinum, Ismene, Buphane, Calostemma, &c., while he had only raised the usual seedlings.

It is hard to say within what limits the operation may be successfully practiced. The general rule is, that plants only which are very nearly related, are able to inoculate each other. But there may be exceptions to this. At least we know that very near connections have, or seem to have, a great aversion for one another. For example, a raspberry and a strawberry are first cousins, yet they appear to have no mind for an alliance. A gooseberry, currant, and black currant, are still nearer to each other, and their repugnance seems invincible; at least nobody has yet found means to hybridize them with each other, though many have attempted it On the other hand, Heaths, different as they are from each other, intermingle freely; Cereus speciosissimus is readily inoculated with the night-flowering Cereus; and even the creeping Cereus has been crossed with the former; the Rhododendron will fertilize the Azalea; and, strangest of all, the Red Cedar on several occasions has been found to inoculate the American Arbor Vitæ, the issue from which is that curious whip-cord-branched plant, called in the gardens Thuja filiformis. This singular

shrub was so produced for the first time in Messrs. Loddiges' Nursery at Hackney, and has since been obtained in the same manner at Paris. These facts open a very wide field for inquiry, and are especially valuable as affording evidence that the limits of hybridizing are far from being narrow.

In the midst of many experiments conducted without exactness, from which no safe conclusion can be drawn, there are some which, in the hands of such men as the Dean of Manchester, seem to justify the important inference that, as a general rule, the properties of the male parent will be most conspicuous in the hybrid. For example, Mr. Herbert crossed the long yellow-cupped common Daffodil with the small red-edge-cupped Poet's Daffodil; and the seeds of the common Daffodil furnished a bulb with most of the attributes of the Poet's Narcissus. The same gentleman obtained also out of a capsule of Rhododendron ponticum, inoculated by Azalea pontica, seedlings which had entirely the habit of the latter or male parent. When the common scarlet Azalea, with its crimson flowers and narrow leaves, was inoculated by Azalea pontica, Mr. Gower found that its seeds produced plants much more like the male than the female parent. Exceptions, or apparent exceptions to this, do no doubt exist, and hybrids could be found which are either half-way between their father and mother, or more like the mother than the father; but as far as any means of judging at present exist, these would seem to be the exceptions, and not the rule; and therefore the greater influence of the male may be taken as a tolerably safe guide in all experiments upon this interesting art.

Paper from Multicaulis.

Dr. Stebbins, chairman of the National Convention of Silk-Growers held last fall, stated that he had had several reams of paper manufactured from the leaves of the multicaulis, which satisfied him, that with some improvements, an excellent article could be made. He had on hand a ton of leaves ready for the manufacturer, and would write the result of his experiments on multicaulis paper.

He further adverted to the matter of obtaining silk for coarse goods from the inside bark of the mulberry. Yankee ingenuity will yet extract wealth from these rude hints. It is certainly worth making the experiment.

The Blackberry and Dewberry.

To the President of the Horticultural Society of Cincinnati:

Why is the cultivation of the Blackberry and Dewberry so much neglected? Both might be greatly improved by cultivation. In the Blackberry, especially, there is a great diversity in the size and quality of the fruit, and much would be gained by a judicious selection. I saw last season, in its wild state, fruit measuring three and a half inches. There are white varieties of both kinds. I have for years cultivated the Blackberry as a garden fruit, and shall in future collect the finest varieties, and give them a careful culture; and also the Dewberry. I would advise the Society, in giving their accounts of Western productions, and the growth of Western plants, and the size of Western fruit, to keep short of the truth. Cincinnati is already getting a bad name abroad for truth and veracity, on this account. They cannot comprehend it to be possible, that a single individual should sell one hundred bushels of Strawberries of a day in our market, nor how he can afford to do it, at four, five, and six cents per quart. Nor will they ever know. They are too wise to learn from backwoodsmen, and will not believe in the doctrine of male and female plants. Till they learn this, Strawberries will be scarce and light with them. Twelve years since, I tried to make an intelligent Horticulturist in New-York believe this. Unfortunately, the celebrated botanist, Dr. Torrey, was his relative, and as the Doctor did not believe the doctrine, he would not give it a trial. It is the more strange, as all the Strawberries, growing wild in the vicinity of that city, and in the state, have staminate and pistillate plants. In most, amounting to a complete separation of the sexes. I have a young Dewberry, now planted only seventeen months, completely surrounded by a thick Blackberry patch, that has this season made numerous shoots, and some of them measuring from eighteen to twenty-seven feet. But if you put this in print, drop one-third. Members of the Society, whose prudence may be relied on, can call and see it. It is still growing vigorously.

A MEMBER.

Cincinnati, September 15th, 1844.

Say—N. Longworth

☞ Select seed-corn from the highest and largest, and from those stalks that bear the most. Do this for years together with the large yellow corn, or large white, or any other.

The Hyacinth.—Hyacinthus Orientalis.

"Shade-loving Hyacinthus! thou comest again,
And the rich odors seem to swell the flow,
And the lark's song, the redbreast's lonely strain,
And the strainer's tune—best sung where wild flowers blow,
And ever sweetest where the sweetest glow."

This very prepossessing bulbous flowering plant is a native of the Levant, and quite common about Bagdad, where it flowers very profusely in its native state in the spring, the same time as with us; and being highly odoriferous makes them very desirable. The bulb is tunicated, sending forth a scape with a spike of flowers; some are single, and others double; the latter, strictly speaking, is the *Florist-flower*, but the single are gaining favor fast, and more sought after for early flowering in glasses, the double being certainly more desirable for beds and borders. The single emit their odor more sensibly, and their spikes containing more bells than the double, is the reason why they are more sought after to flower in glasses. The Hyacinth has been in cultivation in Europe above three hundred years, and was imported by the Dutch originally from the Levant; and it appears that the climate of Holland, more especially about Harlem, is more congenial to their culture than any other part of Europe, and the Dutch florist has bestowed much pains on them. It appears that the first double flower was produced by one Peter Vœrhelm, during whose life a double Hyacinth was worth about five hundred dollars in the Harlem market; since that time, a single root has been sold for one thousand dollars. The roots increase fast, and the mania being carried so high, as a matter of course, competition caused a considerable decline in that trade, but of late bulbs have been sold as high as fifty dollars. Catalogues are published annually, both in Holland and England, containing about two thousand, with names from a clear white to what is called a black. Blue, pink, and white, are the predominant colors, both single and double. Double yellow is not common, therefore rarely met with, what is so called in the catalogues to the contrary notwithstanding.—Could we only see a bed of these enchantingly fine flowers in Holland,—for its their practice to cultivate acres at a time,—it would fascinate to such a degree, as probably to give us a distaste to cultivate on such a small scale as we are compelled to resort to. The bulbs brought to this country and sold, are nothing but the refuse of the Harlem market; still, our ideas on this subject being somewhat limited, makes them appear more beautiful than they otherwise would. I do not consider any place that does not receive the benefit of the salt water breeze, altogether congenial to the culture of the Hyacinth; there are some situations more suitable than others. Mr. Ernst, of Spring-Garden, has been more successful with them than any of his neighbors; this I attribute, in some measure, to the damp vapor arising from Mill Creek, and the sand and manure he has to mix with his soil to make it friable, which of itself is a clayey marl, and by no means fit for bulbs. The Hyacinth, in this country, does not flower well over one or two years. Seven years ago, when in Europe, I selected some very choice colors from different establishments, and the first season they flowered well; so that my expectation was fully realized, when I found them increase so well. I disposed of some; the balance were planted in my garden, in full expectation of their being as good the following season; but my surprise was great, when I found them worthless. I then surmised, from their degenerating, the climate was not congenial to them; which opinion has been strengthened by experience. Still, my impression was, if the bulbs could be acclimated, as a matter of course the obstacle would be obviated. I then commenced planting the small offsets, saved from the larger bulbs; some flowered the first year; the second, I took them up and replanted them into another bed, which appeared to answer well, until the fourth year, when the season was a rainy one, and nearly the whole rotted. Thus my golden dream had vanished; and in some measure I was satisfied it was fallacious to cultivate them, unless renewed every season with fresh imported bulbs at a cheap rate. Still, it would be as well for others to try from offsets, for my being unfortunate is not sufficient proof that others should not succeed. I should therefore recommend their being planted in a rich sandy loam, from the middle of October to December, in an open, airy situation, with a bed four feet wide, which will enable a person to weed from either side with facility, and your bed of any length, according to the number of bulbs to be planted. Plant seven across, equal distance, and nine inches apart the other way. When you are ready to plant your bulbs, make a row five inches deep, and lay the bulb on sand, which will prevent stagnant water settling against it, and also help to keep the bulb warm; after thus placed, draw the soil over them, and when the cold weather sets in, cover the bed with manure from the White-lead factory, from one to two inches thick, to preserve the bulbs from the severity of the frost and deleterious effects of heavy rains, both being detrimental. In the beginning of March, if the bulbs begin to grow, and the weather mild, it will be necessary to remove the manure by degrees, as we sometimes have a hard frost in this month, which would check them much. In April, the scape will begin to appear, and about the time the flowers begin to expand, it will be necessary to tie them up to a small stick neatly, as the rain will beat them down and destroy the beauty of the corolla, or bells. The Dutch florist's plan is to take the bulbs up about four weeks after they have done flowering; but in this

country, they had better remain until the foliage is entirely decayed. Some people are desirous of flowering the Hyacinth in glasses, which, probably, from the circumstance of their not succeeding better in this country, is the best plan; to effect this object, the best way will be to plant the bulbs in the ground in October, to remain there about six weeks, to induce them to throw out root fibres more regularly; then take them up, wash them clean, and put them in the glasses made on purpose, called "*Hyacinth Glasses*," and fill up with soft water, so that the bulb be immersed about quarter of an inch, and change the water whenever it becomes fetid; and they must be kept in a warm room, for if allowed to freeze your glass will break. If your bulbs are not buried before placed in the glass, it will be necessary to put them in the dark to induce the roots to shoot; then place them in your glass of water. Bulbs can be put in glasses until the middle of January, with tolerable success. Hyacinths thus treated, seldom flower the second season. If you wish early flowers, you can plant them in pots, which make a pretty appearance in the parlor, and will do nearly as well as if planted in the open ground, provided you do not give them too much water. You can forward them by plunging the pots in a hot-bed, but if treated in that way they will be good for nothing after.

T. WINTER.

Rural Cemeteries.

There are few things of a more engaging nature, than the interment of the dead; for however certain it is that those whom we love are forever departed from us in this earthly career, when death dissolves the mortal body to its parent earth, it naturally follows that we all have a lingering desire to be deposited by the side of our friends, who have gone before, and where our ashes can remain undisturbed as mementoes to the living generation. Ancient history fully authenticates this subject as one of the most important considerations of the age,—as we find the sons of Heth, in order to do honor to Abraham at the death of Sarah, offered him the field of Macphalia for a burial ground, as the most complimentary manner of acknowledging so mighty a prince among them. "Abraham communed with them, saying, If it be your mind that I shall bring my dead out of your sight, hear me and entreat for me to Ephron, the son of Zohar, that he may give me the cave of Macphalia, which he hath, which is in the end of his field; for as much money as it is worth, he shall give it me for a possession of a burying-place amongst you." That this field was held in the family as a Cemetery, we have positive demonstration, by the earnest desire of Jacob, when bestowing his blessing on the children of Israel, he emphatically charges them concerning his burial, and says,—"Bury me with my fathers in the cave that is in the field of Ephron, the Hittite. There they buried Abraham, and Sarah his wife; there they buried Isaac, and Rebecca his wife; and there I buried Leah, and there they buried Jacob also."

The most splendid place as a Cemetery at the present time, is perhaps that of Pere La Chaise at Paris, where the remains of some of the greatest nobles of Europe are entombed in the most superb sepulchres; the artist, the sculptor, and the architect, have there exercised the first talent of the day, to commemorate these relics in the most attractive and lasting manner. But, however magnificent these splendid specimens of *art* may appear to so polished a nation as the French, it was ever an opinion I have cherished, that the sanctuary of the dead should be associated with *simplicity*, and that nature's vestment is the best garb that can surround the interment of the departed. For an example of this assertion, I will refer the reader to that beautiful Cemetery at Mount Auburn, Massachusetts, which perhaps for rural scenery is not surpassed by any of the present day; there nature has done all that could be desired, to form a place precisely adapted to what it is appropriated. Nothing can surpass the scenery of this congregation of the dead. The ground being diversified, gives an ease which is always required in such places, formality ever being objectionable in such grounds, as nothing is more incongruous than straight avenues and walks measured in certain distances, and leading in an abrupt manner to certain points. To the diversity of the ground, may be added the various kinds of trees and shrubs with which this Cemetery is covered; and in addition to this, the just and correct manner in which it was laid out by General Dearborn and his coadjutors. The Cemetery is entered from a main road by a very appropriate gate, with a main avenue, leading in a winding manner through the central part of the ground; from this, other avenues intersect the grounds into main divisions, and from these, walks are laid out and so contrived as to divide the whole at convenient distances, suitable for the lots intended for interments. All this is done in the most skilful and natural manner, without stiff conformity or in any way defacing the primitive beauty of the place.

The visiter, on entering Mount Auburn, is at once interested by the very appropriate entrance, and in traversing through the Cemetery his mind is continually impressed by the pleasing variety of the scene. Each avenue or walk winds its way to something attractive; one to the monument of Spurzheim—another leads to the relics of the Pilgrim fathers—whilst some wind their way to neat lots, margined with line fences, or iron railings; and indeed wherever he goes, there is something inviting and engaging to the imagination, until at length the

mind almost forgets that it is roaming among the sanctuary of the dead. The natural beauty also of the many different kinds of trees and shrubs, with the pretty borders of roses, white lilies, and flowering plants, tastefully disposed around the lots, give a finish to the scene, whilst the Mound, in the central part of the ground, that overlooks Boston, Harvard College, and the winding Charles, that meanders through many distant and flourishing towns and villages, renders Mount Auburn one of the most beautiful places known.

EDWARD SAYERS.

Cincinnati, Ohio.

Letter from Dr. Kirtland on Fruit.

Cleveland, Sept. 15th, 1844.

Dr. Smith, of Cincinnati.

My Dear Sir:—Your kind letter, by Mr. James, was duly received.

The present season is peculiarly favorable for the production of fine fruits on the immediate shore of Lake Erie, though they were cut off by late frosts in the interior. Though I have owned my farm only three years, I have this summer been able to test the character and qualities of a very numerous list of fruit. You would be surprised to see my pear trees particularly, not over six or eight feet in height, bending under their load of fruit.

One of the greatest drawbacks to my pleasure in this line is the falsity of some of the Eastern nurserymen's labels. Immense damage has been done me in this way. Mr. Giddings, and myself, in company purchased, three years since, one hundred and fifty dollars worth of selected varieties of fruit trees; not one-half of which have been true to the labels.

If I have sent you at any time the Florence Cherry, you must change it, for the tree from which I propagated, and have circulated extensively, is nothing more than a poor Mazzard.

My tulips are fine, healthy, and showy, but not very fine select kinds.

One of the Douglas Peach trees lived, the other died. The survivor shows some tendency to mildew on the extremities of the limbs, as do all the varieties of the Old Red Rareripe in this vicinity.

Grapes do well for the table in this locality, and never fail to produce fine crops, but from a neglect of summer pruning, which is not understood here by our gardeners, the fruit rarely attains high flavor, or forms full bunches.

Ours is perhaps the best locality in the United States for cherries. Mr. Cable exhibited twenty-three varieties of fine fruit at one time before our Horticultural Society, and we had them in succession here for *seven* weeks this season. By pursuing my method of engrafting, an account of which was published in the Cleveland and Columbus papers last spring, they can be propagated with as much ease and certainty as can the apple or peach.

The blight has not been seen with the pear this season, and we find that bold and prompt amputation below the diseased part, taking care to perform the operation as soon as the malady is manifested, and to burn the diseased limbs without delay, is a sure remedy, though it often greatly deforms the tree.

Yours very truly,

J. P. KIRTLAND.

The Curculio.

September 15th, 1844.

Messrs. Editors:—The many theories which correspondents have put forth to the world through the medium of your valuable paper in regard to the Curculio, and the manner of preventing it from destroying some of our most valuable fruits, viz. Plums, Nectarines, &c., led me to examine more minutely the habits of this insect. The theorists who have written in regard to salt, lime, &c. being an entire preventive, by being sown around the tree, have come to conclusions rather hastily I fear, as in my experiments of that kind at least I have not been so successful. The author of the article entitled "A Year Old," has, in my opinion, given the public a more certain and infallible cure for the Curculio, than any theory I have yet seen before the public. From a number of experiments myself, I am well satisfied that neither salt nor brine have the effect to kill the insect, although it will annoy him to some extent; nor have I yet found any composition or chemical preparation which will have that effect, that may be used with safety to the trees. From the lazy, indolent habits of the insect, it is inclined to remain with, or near by, the first tree it may meet with, except it be disturbed, burrowing a portion of the day in the earth beneath, or concealing itself in grass or weeds. It is with difficulty you can get this insect to fly in the day-time, although at night it flies with freedom. It avoids a pavement, not as some have supposed because it was so tenacious about the preservation of its young, but because it likes for itself good accommodations without having to travel far to get them: hence it visits those trees that are planted in the open ground, with loose soil, grass, or weeds, while the trees within the pavement are left almost unmolested. This is my theory in regard to this matter, and if our friends of the salt experiment cannot give any better reason why salt will preserve plums from the curculio than has yet been given, we shall take the liberty to presume their science is yet in its infancy. Yours, &c. J. C. F.

P. S. The article written by Mr. Graham to the Horticultural Society upon the subject of blight in pear trees, tracing its cause to the ab-

sence of the electric fluid, or a negative state, is, I think, well worth due consideration. In support of Mr. Graham's theory, I will relate a circumstance which came under my own observation. About seven years ago, my father had growing some five or six large fine pear trees, which about the same time were all struck with blight; about two or three weeks after they had shown the blight to some considerable extent, during a thunder-storm one of the trees was struck with lightning about seven feet from the ground, running down the trunk, damaging it, however, but little. This tree entirely recovered from blight, and has shown no signs of it since, while all the others died either the same season or the one following. Although this does not prove Mr. Graham's position, I thought it worth, perhaps, a passing notice.

Yours, &c. J. C. F.

Blight in Pear Trees.

To the President of the Horticultural Society:

Sir:—In a communication addressed to the Society in May last, which they did me the honor of publishing in the *Farmer and Gardener*, I gave the result of a series of observations made ten years ago on the blight in pear trees, in which the injury was attributed to a species of brown Aphis peculiar to that tree. As many years had elapsed since I had seen the insect, and as that communication called forth some discussion, as well as doubts on the subject, I was induced to renew my observations, which have been frequently repeated during the present season in Kentucky, where I now reside. On my premises are several large pear trees, seedlings, and many in the neighborhood, none of which have been touched by the blight during the last summer or spring, but during the month of September, in which there was no rain, there appeared some signs of the disease on the leaves and some small branches.

I examined these trees frequently during the early part of the season, but looked in vain for the insect in question. In August, however, I began to find them, and in the course of September they became very numerous on all my fresh and vigorous growing pear trees, and next season I expect my trees will suffer greatly by their depredations, unless the severity of the coming winter should luckily destroy them. It is the same identical insect here, that was observed in the State of New-York ten years ago, and which I then believed destroyed so many valuable trees, and which I doubt not will prove equally destructive here, unless we should prove more fortunate in finding a remedy for the evil. These insects may now be seen in great numbers (October 1st,) preparing for winter quarters, secreting themselves in small groups in every chink and cranny of the bark, but more especially close under the axilla of the leaves, and under and around the newly formed buds, so as to be prepared, on the expansion of the tender leaves by the warmth of spring, which also imparts to them renewed vitality to recommence their labors, and that too at a season when the tree is least able to part with its vital fluids—in spring, and the early part of summer, before the young buds are formed.

In autumn, when the juices of the tree become more elaborated, and are depositing more alburnum, as well as other secretions peculiar to itself, and when the well-formed buds can supply the functions of the denuded leaves, the insect is incapable of committing so much injury.

Although not a professed Entomologist, I will attempt to give such a description of the insect as will enable a close observer at least to recognize it, as well as to become acquainted with its habits. Size—length, half a line; breadth, two-thirds its length. Form—compressed-oval, with an appendage on each side resembling a wing-case, but they have no wings. The head is short, rather broad, with two antennæ standing out horizontally, a little curved backward; front, inflected; eyes prominent, of a reddish orange color. Thorax—about one-half the length of the insect, protuberant above, and the wing-like appendage on each side. Abdomen—nearly as long as the thorax, slightly rounded above, and running off to an edge all round, and beset with bristles or hairs along the border. Color—above, brown nearly resembling that of the branches; the protuberances on the back of the thorax, of a whitish green, with eight or ten dark spots, three reddish transverse lines, with two intervening black lines across the back part of the abdomen where it joins the thorax; below, pale green. The front of the head is inflected under the breast, and terminates in a pointed beak, or sheath, between the fore legs, from which proceeds a hausteltum, or sucker, very minute, but about twice the length of the whole insect beside, and capable of being moved in every direction, and may frequently be seen curved round in front of the head in the form of a horse-shoe, and it can be withdrawn within the sheath or case so as not to be visible. When the insect is fixed on the point of a fine needle for examination, I have seen it thrust out its sucker perpendicularly downward, appearing, when magnified, one inch in length, but no larger than a very fine hair, thus showing its extreme minuteness. With this sucker it is capable of piercing the tender culicle of the leaves and young branches, especially under the axilla of the leaves, and around the buds and fruit spurs, where it may be seen at its work, extracting the juices, from which it derives all its nourishment, to the great injury, and sometimes death of the tree. It has six legs, and can travel with some rapidity from

+ the shock killed the small insects that feed on the laburnum or inner-bark

branch to branch, and from tree to tree; in what manner they pass from one tree to another, I have not yet discovered, but they sometimes make their appearance very suddenly, and in great numbers, upon one tree, and perhaps in a day or two disappear as suddenly. The insect appears to be viviporous. I have never been able to discover any eggs, even with a powerful lens, but great numbers of very minute and perfect insects, generally in company with older and full grown ones. About the 20th of September, the young branches and leaves of my pear trees were beset with patches or small drops of a glutinous fluid like honey, and sweet to the taste. In and about these drops of honey were seen at that time great numbers of young insects, which it would seem had been deposited by the parent, with, or at the same time with this honey-like fluid, probably to afford them nutriment until they acquired sufficient strength to be able to pierce the cuticle with their delicate hausteltum, and derive a more crude nourishment from the sap of the tree.

As this insect appears to combine all the essential characteristics of an Aphis, and as I have never observed it upon any tree except the pear, I shall call it the *Aphis pyri*—leaving it, however, for some learned Entomologist to place it in its proper group. It differs, however, from some other species of Aphis, or Eriosoma, in not secreting a cottony substance from the surface of its body, to shield and protect its offspring from the weather; but I have seen it drive out a family of another species of Aphis, that had deposited a fine black cottony nest for a winter habitation, and take possession of it themselves.

Although the Aphis pyri is the worst enemy to the pear tree, I have no doubt other species of this numerous order of insects contribute a share in the destruction of the trees. One other species in particular may now be seen on the pear tree in considerable numbers, of a wine color, of a rounder form, and secreting a black cottony substance upon the branches, in which it shelters itself and its young during the storms of autumn and winter. It is the nests of these insects that are sometimes taken forcible possession of by the Aphis pyri, and appropriated to their own use. As all Aphides obtain their nourishment by sucking the juices of plants, it may reasonably be concluded that all those found upon the pear tree perform their share in the work of destruction.

With much respect,

S. MOSHER.

Latonian Springs, October 4th, 1844.

Judge dairy cows more by the quantity of cream than of the milk they produce; milk is always thinner soon after calving, aftewards it gradually becomes thicker.

Letter from Mr. Ernst.

Extract from a letter from Mr. Ernst to the Cincinnati Atlas.

Mr. Ernst, after visiting Dr. Kirtland, of Cleveland, an eminent horticulturist, says:

"I was gratified to observe the efforts making by the Doctor to produce new varieties of fruit. His process is, after having raised his tree from the seed, to graft the top, where the crown should be formed, with some desirable variety, leaving a tier of branches below the graft.—Those he spur-prunes; by this means they are forced into fruit-bearing buds. He is thus speedily enabled to determine its worth.—Should it prove a sort worthy of propagation, he has but to cut off the grafted head, and he has a new tree on its original stock; if otherwise, he has but to lop off the original branches, and he has a good tree. He has many trees in this condition, from which I doubt not we shall have a favorable report in due time.

"The corn crops generally look well, many fields very superior, with some here and there not worth the harvesting, evidently showing the neglect at the proper time of the hoe and plough. Fruit we found more abundant on the trees as we approached the Lake, though I regret to say, so far as could be judged of in passing along, generally of an inferior order; many of the peach trees broken down with their loads of fruit, yet I doubt if one could be found above a common seedling until you approach Cleveland, where there is a laudable and an animated spirit of improvement in horticulture prevailing.

"Here we made a short stay, and spent a day with our mutual friend Dr. Kirtland, and were much delighted in viewing his fine collection of fruits and trees. It is surprising what industry and perseverance, combined with intelligence, may accomplish in a short space of time. The Doctor is located six miles west from Cleveland, commanding a beautiful view of the Lake. This place he purchased three years since; he found it almost barren of fruit trees; now he has a large collection of choice cherry, plum, peach, apple, and pear trees, many bending under their ample loads of fine fruit. This was especially so with his pears, plums, and apples, some of which I had never before seen in fruiting. It is truly gratifying to witness the spirit of improvement which, by his example, is being infused into the public mind. From this we may look with confidence to the no distant day when the borders of Northern Ohio will teem with their highly cultivated orchards, the fruit of which will yield no small income as an article of exportation to their proprietors. Indeed large quantities of cherries already find a good market."

The Potato.

To get New Varieties, &c.

This very valuable esculent deserves rather more attention than it commonly gets. Some few varieties (one, two, or three,) are usually cultivated for a long succession of years, until they "run out," as it is called,—that is, produce small, badly-shaped tubers, and but few of them. In this neighborhood, the White Neshannock and Shaker Blue, are the two most commonly cultivated, and of these the former is more saleable and less prolific of the two. The only means taken to keep the crop up is to change the seed occasionally,—once in two or three years.

The object that I have in view is to induce some amateurs, or persons who have the leisure, to raise new varieties from the seed. This may be done in two ways,—one of which is this, which I extract from Lindley's Theory of Horticulture; it was practiced by Mr. Knight: "The course, then, to take in obtaining the largest possible tubers, in a *new* variety of the Potato, would be in the first place to effect that end temporarily, but during several successive seasons,* by abstracting all the flowers and fruit, (balls,) and by such other means as may suggest themselves, and then to obtain the most perfect *seed* possible by a destruction of the *tubers* during the season when seed is finally to be saved."† This seed should be cleaned from the balls, and kept in a little dry sand till spring, and then sown in a light loamy soil, either in pots or the open ground; the plants will need to be kept free from weeds, and slightly watered if the weather should prove dry. The tubers, the first year, will be about the size of hickory nuts; they should be carefully put away, and the produce of each stalk kept separate. The stalks that die first will produce the earliest varieties. In the next year they will, with good cultivation, produce tubers fit to be eaten, and their character can be partially decided upon; though not fully till the third year. Note that the produce of the late dying vines will not be fit to use till some time in the winter. There will perhaps be one in ten plants which will prove a desirable variety. Now our amateurs and fancy farmers might do great service by trying this experiment.

Another plan for raising new varieties from seed is this: to procure the seed by crossing two sorts whose good qualities it is wished to unite,—as for instance, the Neshannock, or Mercer, whose good qualities are well known, with the Rohan, celebrated for producing large crops. Select a strong vine of the Neshannock, and a few days before the anthers are likely to burst, cut out with small scissors carefully, the stamens, and cover the flower with a piece of gauze; then in the morning take the complete flower of the Rohan, or other, and dust the pollen into the stigma of the Neshannock. Treat the seed afterwards as in the former case.

Many of our farmers hold on to the old method of planting in hills, rather than in drills. The tubers grow around the crown of the vine, like a necklace; where fine or fair stalks stand together, it would seem that only on the outside of the hill could tubers be formed instead of all around the vine. Farther, potatoes are often too much hilled; this turns off the rains, and in a climate like ours, is hurtful to the potato, which requires moisture. They should be cultivated, but not earthed up *after* the tubers are formed. The drills may be drawn with the plough, about three feet apart, and the manure thrown into them, upon which drop the potato; though their flavor is better when planted in good, rich, mellow ground, not manured in the drills.—It is thought better to cut the potatoes for sets a few days before planting, leaving two eyes to each piece; the wound heals over, and the eyes shoot more vigorously. Mr. Knight, an English Horticulturist, found that by picking off the blossoms the yield was increased nearly one ton to the acre. This can only be done where there is a surplus population capable and willing to do nothing else, or where the land is high. The rent of potato land in Ireland is sometimes as high as fifty-five dollars the acre a year, and their greatest yields reach four hundred and eighty bushels the acre. Mr. Holbrook, some years since, raised eight hundred bushels on an acre, upon his farm on the Hudson river. The uses of the potato are very various, and I see that large quantities are now used in Maine in making Tapioca, Starch, &c. In conclusion, I would suggest to the various Agricultural and Horticultural Societies, that they offer liberal prizes for new varieties, which shall prove excellent upon trial.

C. W. E.

* In the variety from which the seed was to be saved.

† Be careful not to break the roots in removing the tubers.

☞ Guinea fowls are a preservative against hawks with poultry; and they lay more eggs than hens.

The Flower Garden for November.

This will be another busy month in this department, in order to bring the work for the season to a close. Take up your Dahlias without delay, or you will run some risk in losing them; put them in an airy room to dry, and pack them away for the winter. I wish the reader to observe, that any place where a potato can be kept, will also suit the dahlia. Tulips, Hyacinths, Crown Imperials, and Crocuses should be planted without delay, and choose a dry day for planting. Begin to protect tender roses intended to be left out; trim and tie them before you cover them, for to leave all the old wood would be superfluous, as the bush would put out plenty in the spring, and flower profusely. Trim hardy roses by cutting out the old wood, if not already done, and mulch them before the heavy frost sets in. Manure and dig your beds and borders ready to receive such plants as you wish to remove, particularly Roses, Pæonies, and all ornamental trees, also biennials and perennials. Take up Tuberoses, and all tender bulbs that will not stand the severity of the winter. Carnations, choice Pinks and Picotees should be protected without delay. Lilies may still be removed, if not done, and the sooner the better. Remove every plant into its winter quarters, that is any way tender.

THE PARLOR.

Camillias should be kept clean and watered well to make their buds swell. Oranges, Lemons, Myrtles, Oleanders, and all other plants, will require plenty of air on all favorable times, and not water so freely. Geraniums must be well guarded against frost. Hyacinths, intended for glasses, should be buried in the open ground for several weeks to induce them to throw out root fibres more regularly than if put in the glasses at first. Cinerarias should be repotted without delay. Auriculas, Polyanthus, indeed all primulas should be protected. Crape Myrtles, Pomegranates, and Hydrangeas, may be put in the cellar out of the way. Pot Roses should be kept in the house. Chrysanthemums will now be coming into flower, and will require a good supply of water to bloom well, and have plenty of air given in mild weather.

T. WINTER.

Verbena Sayersii.

A seedling originated with Mr. John Sayers, at the Reading Road Nursery, near Cincinnati; an intermediate variety of the Melindris and Tencroides. This forms a pretty addition to the present collection of the Verbena, being very free-flowering in the summer, and early in the spring, forming a fine truss of white flowers, tinged with rose, varying to a clear pink color. It should find its way into every good collection of plants.

From the Albany Cultivator.

On the Blight of Pear Trees.

It appears that they are subject to blight from two causes,—like other trees, if placed in land which at times is very wet,—in dry times such trees will suffer from want of moisture at the roots, and like forest trees in similar cases, will die off; they should be placed on rolling land, where the water could run off freely. But the most common cause of blight in pear trees is a worm, the egg of which is deposited in the branches by a small insect. If iron ore or cinders, or any other articles of iron, be placed around the roots of the tree, the insect will bid adieu to the tree. Having tried this remedy in a sandy soil, and also on a stiff soil, and in places far distant from each other, and having driven off the insect, when the trees of others were very much injured or destroyed in my neighborhood, I feel as if all who are troubled by these insects should carefully try the use of iron articles rather than to be under the necessity of continually topping off the limbs which contain the worm or young insect. It is probable that the iron is unfavorable to the worm, which drops from the branches and makes its wintering place at the root of the tree, and then the insect avoids an unfavorable location for its young. But whatever may be the theory, it is sufficient that iron has the desired effect.

C. D.

Malay Apple.

The Malay Apple, an East-India fruit, is now raised at Vicksburgh, Mississippi. Its scientific name is Eugenia Iambosia. In the East-Indies, the native clime of this fruit, the tree grows to a height of twenty feet; at Vicksburgh it is only five feet in height. The apples are about the size of a small peach, with a similar color, fragrant smell, and have the taste of a very sweet common apple, with one seed in the centre, of the size and color of a chestnut.

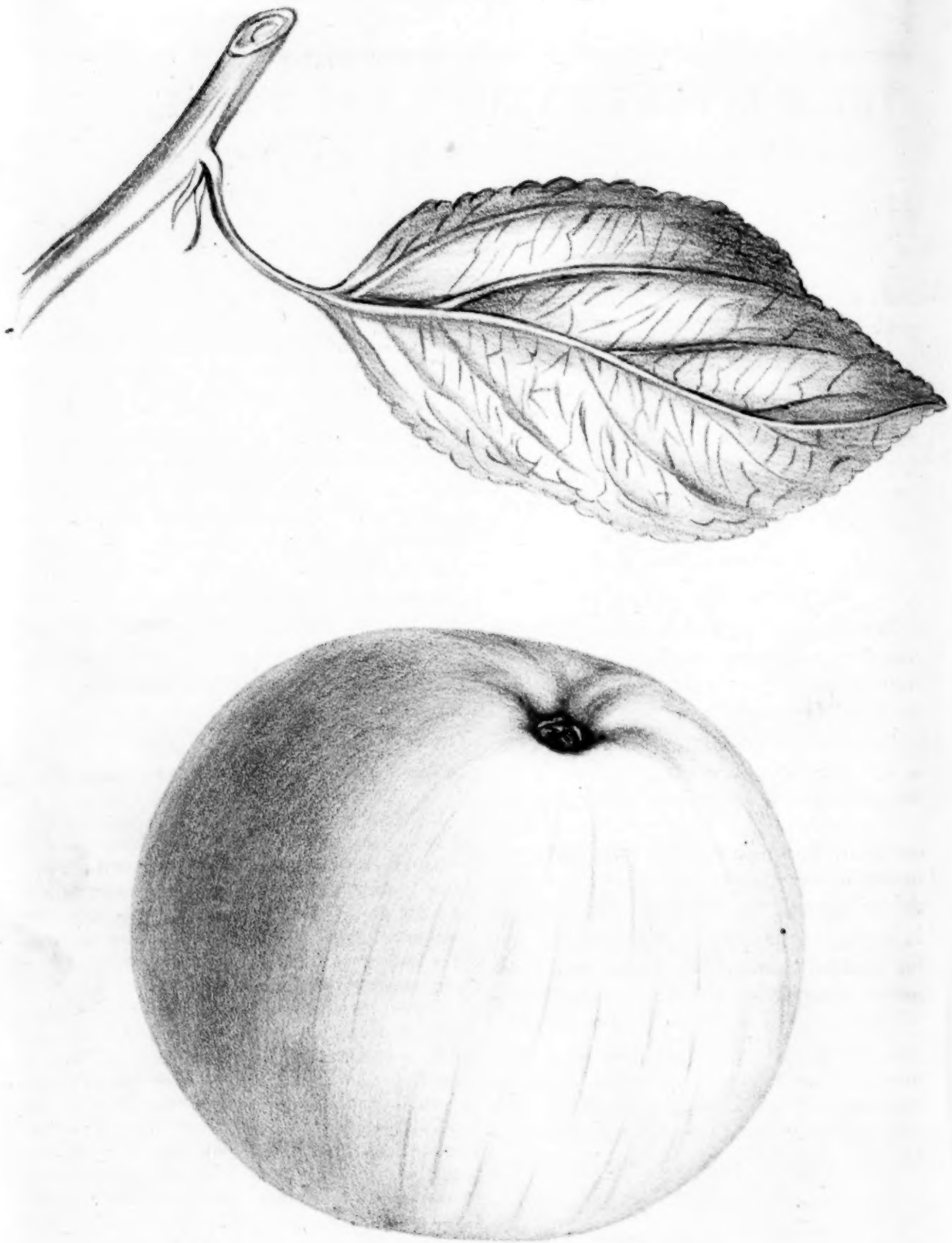
Rearing Peach Trees.

Mr. Allen W. Dodge, says in the Massachusetts Ploughman, that he prefers the following mode of planting peach stones: Deposite the stones, after being taken from the peach, in sand or dirt; put them in the ground, slightly covered, in the fall. Take up the stones early in the spring, crack them, and plant immediately the meats or pits. In a week or ten days they will all be up, without fail, just as certainly as so many peas or kernels of corn.

Deposite manures in long heaps, and cover with eight inches of earth.

Names.	Color.	Form.	Size.	Use.	Texture.	Quality.	Season.	Situation.	Remarks.
Chaumontel très Gros. Doyenné de Hiver. Doyenné d'Htver Nouveau. Doyenne du Printemps. Canning. Seigneur d'Hiver. Phillippe de Pâques. Du Pâtre. Beurre Roupé.									
Beurré Epine, see *Beurré Rance.*									
Beurré de Flandre, see *Beurré Rance.*									
69 Beurré Grise d'Hiver.									
70 Beurré Grise d'Hiver Nouveau.									
71 Beurré Grise Supérieure.									
72 Beurré Grosse.									
Beurré Gurle's, see *Gansel's Bergamot.*									
Beurré d' Hardenpont, see *Glout Morceau.*									
Beurré d' Hiver de Bruxelles, see *Easter Beurré.*									
Beurré d' Hiver, see *Chaumontel.*									
Beurré Incomparable, see *Beurré Diel.*									
Beurré d' Hiver Nouvelle, see *Glout Morceau* and *La Fortunée.*									
Beurré Kirke, . . .	p. g. r.	pyr.	2	T.	T.	2	Aug.	S.	Soon decays, mealy.
Beurré Knox, . . .	p. g.	obovate.	1	T.	T.	2	Oct.	S.	Abundant bearer, large and handsome; good, but not first rate.
Beurré Magnifique, see *Beurré Diel.*									
Beurré de Malines, see *Winter Nelis.*									
73 Beurré de Mons, . . Beurre Spence, (of some.)	p. g. r.	roundish.	2	T.	C.	2	Sept.	S.	
Beurré Noire Graine, see *Capucin Van Mons.*									
74 Beurré Noisette.									
Beurré de Pâques, see *Easter Beurré.*									
75 Beurré Parlaque.									
Beurré de Payence, see *Calebasse.*									
Beurré de la Pentecôte, see *Easter Beurré.*									
76 Beurré Picquery.									
Beurré Plat, see *Crassane.*									
77 Beurré Rance, . . . Beurre de Ranz. Beurre Epine. Hardenpont du Printemps. Josephine, (of some.) Beurre de Flandre.	b. g.	obt. pyr.	2	T.	B.	1	Mar. May.	W. S	The best very late sort known; bears well as a standard, and is highly deserving of a wall; its intrinsic excellence as a melting pear, and its late keeping render it truly valuable.
Beurré Red, see *Brown Beurré* and *Gray Doyenné.*									

Names.	Color.	Form.	Size.	Use.	Texture.	Quality.	Season.	Situation.	Remarks.
Beurré du Roi, see *Brown Beurré*, *White Doyenné*, and *Chaumontel.*									
78 Beurré du Roi Extra.									
79 Beurré Romain.									
Beurré Roupé, see *Beurré Diel.*									
Beurré Rouge, see *Brown Beurré*, and *Gray Doyenné.*									
Beurré Royal, see *Beurré Diel.*									
80 Beurré Royal d'Hiver.									
Beurré de Semur, see *Mansuette.*									
Beurre Sieulle, see *Sieulle.*									
81 Beurré Saint Montel.									
82 Beurré Spence, . . Spence.									Said to be excellent; but the varieties received under this name have hitherto proved synonymous with others.
Beurré Spence, (of some) see *Beurré de Capiaumont*, *Beurré Diel*, *Beurré de Mons.*									
83 Beurré Van Marum.									
84 Beurré Van Mons, . .	rus.	pyr.	2	T.	B.	1	Nov.	S.	
Beurré Vert, see *Brown Beurré.*									
Beurré, White Autumn, see *White Doyenné.*									
Beurré, White, see *ib.*									
Beurré, Winter, see *Black Achan* and *Chaumontel.*									
Beurré d'Yelle, see *Beurré Diel*, and *Beurré Bosc.*									
85 Beurré Yellow.									
86 Bezi de Caissoy, . . Bezi de Quessoy. Roussette d'Anjou. Wilding of Caissoy. Petit Beurré d'Hiver. Small Winter Beurré. Terreneauvaise. Nutmeg, (of some.) Winter Poplin.	rus.	roundish.	3	K.T.	B.	2	Nov.Mar.	S.	Peculiar pleasant flavor, esteemed by some.
Bezi de Chaumontel, see *Chaumontel.*									
Bezi Chaumontel très gros, see *Easter Beurré.*									
Bezi d'Echasserie, see *Echasserie.*									
87 Bezi d'Héri, ... Bezi Royal. De Bordeaux.	g. y.	roundish.	2	K.	C.	1	Oct. Dec.	S.	Excellent stewed; tree bears well.
0 Bezi de Montigny, . . Trouve de Montigny.	p. g.	obovate.	2	T.	B.	2	Oct.	S.	
88 Bezi de la Motte, . . Bein Armudi. Beurre Blanc de Jersey.	b. g.	roundish.	2	T.	B.	2	Oct. Nov.	S.	



Dana Apple.